

State Department of Geology and Mineral Industries

702 Woodlark Building
Portland, Oregon

Report by N. S. Wagner
Informant - Mr. Blackwell
December 28, 1944

Wallowa County

NAME: Imnaha Group (Copper).

This is a preliminary report summarizing an informant's account and is submitted here now only because no record of the occurrence occurs in the Department files. A formal and official report will be submitted if and when an examination can be arranged and made. Blackwell is not too co-operative in this connection and somewhat secretive.

OWNER: Mr. Blackwell, 1817 Valley Avenue, Baker, Oregon

LOCATION: T. 2 N., R. 48 E., about S. 35, or in the area around Basin Creek.

AREA: 12 full unpatented claims.

HISTORY
DEVELOPMENT
and
GEOLOGY : There is no early history of any known consequence. Mr. Blackwell has done an estimated 400 to 500 feet of development work in the form of tunnels and pits, but this is spread over a very considerable amount of territory and is far from being sufficient to prove the occurrence up. The longest single tunnel is 150' and this falls short of its objective. Bornite, chalcocite and chalcopyrite seemingly constitute the chief ore minerals although Mr. Blackwell reports the occurrence of native copper in quartz, cuprite and of course malachite and azurite. These minerals occur in what is described as bunches of variable size and shape occurring in and along a dike. Large, relatively barren masses of a red oxide gossan are also reported.

The property is at present optioned to a Mr. Hanks who is planning to core drill it. Said Mr. Hanks is reportedly shipping hi-grade copper from some property in Nevada at the present time. This Mr. Hanks has been identified with local mining off and on for many years, but I know of him as having been associated with no venture of any consequence whatsoever.

Imaha Copper Claim

Copper

NAME OLD NAMES PRINCIPAL ORE MINOR MINERALS

2N 40E 15-16
T R S

PUBLISHED REFERENCES

..... Wallons COUNTY
 Unclassified AREA
 2000 ELEVATION
 ROAD OR HIGHWAY
 DISTANCE TO SHIPPING POINT

MISCELLANEOUS RECORDS

PRESENT LEGAL OWNER (S) ... Ed. A. Hanks

Address 622 Idaho Street, Boise, Idaho

OPERATOR None

Name of claims	Area	Pat.	Unpat.
<u>Imaha</u>			<u>X</u>
<u>Bill</u>			<u>X</u>
<u>Joe</u>			<u>X</u>
<u>Tom</u>			<u>X</u>

Name of claims	Area	Pat.	Unpat.

EQUIPMENT ON PROPERTY None

State Department of Geology and Mineral Industries ^{PSM}

702 Woodlark Building
Portland, Oregon

IMNAHA COPPER CLAIMS UNCLASSIFIED DISTRICT WALLOWA COUNTY

Owner:

B. A. Hanks, 622 Idaho St., Boise, Idaho.

RECEIVED
OCT 2 1947
STATE DEPT OF GEOLOGY
& MINERAL INDS.

Location:

T2 N; R48 E; Section 15 and 16. This is a distance of about $6\frac{1}{2}$ miles by dirt road down (north) the Imnaha River from the town of Imnaha.

Area:

Four unpatented lode claims, the Imnaha, Bill, Joe and Tom, taken June 1947.

Development:

In the sense of pits and shafts, etc, there has been no development of any consequence done on these claims. For a period of several years, however, the present claim owner has been interested in the general geology of the area, and in the possibilities of the existence of a workable low grade copperorebody here. In this connection he has made a study in the area at large and is currently entertaining the notion of drilling a couple holes by way of prospecting subsurface conditions.

Geology:

A series of basalt lava flows regarded as the Columbia river formation of Tertiary age constitute the prevalent formation to be found in the northern portion of Wallowa County from the Wallowa Mountains proper to the state line to the north. A tremendous thickness of these lavas exist as is shown by the exposures ⁱⁿ river canyons such as that of the Snake River which constitutes the eastern boundary of the county, and in the canyon of the Grande

Ronde river which occupies the western portion of the county. The Imnaha River lies between the Snake and Grande Ronde rivers.

Bedrock, or more properly, older underlying formations, are known to be exposed in the Snake River Canyon, a reconnaissance geologic map of which has been made by the U. S. Engineers. These older formations consist for the most part a variety of metamorphosed formations of Permian and Triassic age. But little data has been published concerning other exposures of underlying formations in the canyons of the other rivers. The maps of the Wallowa Mountains published by this department (Bulletins No. 3 and 12) include only the headwaters of the Imnaha River, and the Minam, which is a tributary of the Grande Ronde.

The Imnaha Copper claims are located on the andesitic bedrock exposure which is first encountered at the point where Fence Creek joins the river. Other exposures are reported as occurring further on downstream (north) and at a point about 20 miles upstream known locally as "the Park". The downstream areas are accessible only by trail, but a road extends up the canyon.

The andesitic exposure at Fence Creek is exposed at river level in the canyon and up the sides thereof for a vertical elevation of about 400 to 500 feet before it is obscured by lava. The bulk of the exposure at this point lies on the east side of the canyon. Just how far the underlying formations are exposed downstream cannot be stated at this time as only the southern end of the exposure was traversed during this examination, but ~~the~~ such formations were to be observed as extending for a distance of approximately a mile downstream. Limestone lenses are reported as occurring in the formation in this downstream section.

Evidence of copper mineralization is present, but scanty. While thin highgrade stringers of bornite are reported to occur, copper mineralization is usually evidenced by the characteristically bright colored stains of malachite. These appear to occur erratically and show no especial or conclusive relationship to variations in the country rock or to structural trends. The surface exposures of the country rock are fresh and hard. Chalcocite and malachite were the only two copper minerals identified in a petrographic study of samples submitted from here. ¹

General Information:

The elevation of the area is about 2000 feet. No snow problem exists at this elevation. Access however is hampered by snow as the present access road to Imnaha is via Sheep Creek from Joseph. The elevation at Joseph is 4,191 feet. The nearest railroad terminal is at Joseph.

1 - Samples F 3495 - 1,2,3, and 4. and HB 267

Report by; NSM
Date of examination; August 26, 1947
Date of report; September 23, 1947
Informant; B. A. Hanks

State Department of Geology and Mineral Industries

702 Woodlark Building
Portland, Oregon

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December 28, 1944

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Not Confidential

C O P YREPORT TO MR. GEORGE KOSMOS ON
THE BLUMBERD COPPER-SILVER PROSPECT NEAR IMNAHA, OREGON

In company with Mr. Raymond Carrey on April 14, 1951, I made a reconnaissance examination of the copper and silver occurrence near the Imnaha River eight miles below Imnaha, Oregon. Imnaha is 31 miles by good road northeast of Joseph, Oregon, the terminus of a branch line of the Union Pacific Railroad.

The outcrops bearing mineralization are reached by road from Imnaha post office seven miles to Simmons Ranch; hence by good trail one mile downstream on the east side of the river.

Development consists of a few small open cuts and one short tunnel, now caved.

The rocks are well exposed in the 4,000-foot canyon of Imnaha River. All except those cropping in the lower 500 feet of the canyon at this point are typical essentially horizontal flows of Columbia basalt and andesite. From Simmons Ranch downstream for about three and one-half miles erosion has exposed an area of basalt and andesite which consists of near vertical dikes and irregular masses.

It is in this material that the mineralization is found.

Two zones of mineralization were examined. One was in a vertical, north-south striking andesite dike. The average width is seven feet and 80 feet in length cropping eight feet above the general ground level on a 45-degree hillside. An open cut had been made on either end of the dike. In the cuts and in zones in the dike the principal minerals are azurite (copper carbonate) and malachite (copper carbonate) with lesser amounts of an undetermined metallic mineral. These minerals were observed in amygdules, along fractures and otherwise disseminated in the rock. However, the mineralization is localized in spots in the dike and not evenly distributed. No mineralization was found north or south of the 80-foot section and it appears to have been cut off by later intrusions of lava masses. A sample cut across a seven-foot width above the top of the south open cut assayed 1.2 percent copper and no silver.

About 1,000 feet southeast, another zone of mineralization, but of lesser extent, was observed in a similar rock. A tunnel has been driven to intersect this cropping, but from examination of the dump the objective was not reached.

Approximately 500 feet west, copper stains in a small outcrop were seen, but again with continuity.

It was reported by Mr. Carrey that similar occurrences may be found for a distance of three-four miles down the river.

In summation, I believe the minerals accompanied one or more of the oldest andesite intrusives, but have been cut off and possibly assimilated by later dikes or masses to leave widely disconnected zones. Although these zones show high-grade spots, in general they are too low grade to be of economic value.

Respectfully submitted,

J. W. Melrose

PETROGRAPHIC DESCRIPTION

Oregon Department of Geology and Mineral Industries

Field No. FB 24 #3

Classification Amygdaloidal andesite Portland No. P-3495-3

Collector B. A. Hanks (c/o Baker office) Date collected 4/6/45

Location Sec. 33, T. 2N, R. 48E Quad. Elev. _____

Imnaha Group, Wallowa County, Oregon

Formation _____ Age _____ Origin Extrusive

Relationships _____

Requested by N. S. Wagner Attention to Mineralization

Diagnostic or special features a little "coppery" luster

Megascopeic Description:

- 1. Color gray 2. Texture vesicular
- 3. Minerals plagioclase, chalcocite
- 4. Structures and features _____

Microscopic Description:

- 1. Texture _____
 - A. Crystallinity Porphyritic
 - B. Granularity hemicrystalline
 - C. Fabric non-directive

2. Minerals (Summary)

- A. Primary:
 - 1. Plag. Ab_7An_3 - Ab_6An_4 20%
 - 2. Glassy matrix in the 40
 - 3. Magnetite
 - 4. _____
 - 5. Amygdules unidentified 30%
 - 6. zeolite 30% possibly leonhardite.
 - 7. _____
 - 8. _____
- B. Secondary & Tertiary:
 - 1. Sericite 1
 - 2. Calcite < 5
 - 3. _____ 1
 - 4. _____

3. Alteration

A. Minerals formed Sericite from plagioclase

B. Type(s) of alteration _____

PETROGRAPHIC DESCRIPTION

Oregon Department of Geology and Mineral Industries

Field No. FB 24 #2Classification Partially altered andesite Portland No. P-3495-2Collector B. A. Hanks (Baker office) Date collected 4/6/45Location Sec. 33, T. 2N, R. 48E, Quad. Elev. _____Imnaha Group, Wallowa County, OregonFormation _____ Age _____ Origin Extrusive

Relationships _____

Requested by N. S. Wagner Attention to Mineralization

Diagnostic or special features _____

Megascopic Description:

1. Color gray
2. Texture amygdaloidal
3. Minerals Chalcocite
4. Structures and features few spots showing a coppery luster

Microscopic Description:

1. Texture _____
 - A. Crystallinity Porphyritic
 - B. Granularity hemicrystalline
 - C. Fabric non-directive
2. Minerals (Summary)

Phenocrysts: A. Primary: 1. <u>Plag. Andesine- $Ab_{70}An_{30}$</u> 2. <u>Augite</u> 3. <u>Magnetite</u> 4. <u>Altered olivine</u>	Matrix 5. <u>Plag. laths.</u> 6. <u>Magnetite</u> 7. <u>Glass</u> 8. _____
B. Secondary & Tertiary: 1. <u>Sericite (in plag.)</u> 2. <u>Antigorite (alter olivine)</u>	3. <u>Chalcocite</u> 4. <u>Prehnite</u> 5. <u>Unidentified zeolite? as amygdules</u> 6. <u>Calcite</u>
3. Alteration
 - A. Minerals formed Sericite from plagioclase and prehnite from plag., added chalcocite
 - B. Type(s) of alteration Sericitization, serpentinization.

Red you might want these

PETROGRAPHIC DESCRIPTION

Oregon Department of Geology and Mineral Industries

Field No. FB 24 #1

Classification Basic andesite (partially altered) Portland No. P-3495-1

Collector B. A. Hanks (Baker office) Date collected 4/6/45

Location Sec. 33, T. 2N, R. 48E Quad. Elev. _____

Imnaha Group, Wallowa County, Oregon

Formation _____ Age _____ Origin Extrusive

Relationships _____

Requested by N. S. Wagner Attention to mineralization

Diagnostic or special features _____

Megascopeic Description:

- 1. Color gray 2. Texture porphyritic
- 3. Minerals _____
- 4. Structures and features irregular fractures

Microscopic Description:

- 1. Texture _____
 - A. Crystallinity Hemicrystalline originally
 - B. Granularity Porphyritic
 - C. Fabric _____
- 2. Minerals (Summary)
 - A. Primary:
 - 1. Andesine $Ab_{60}An_{40}$ - $Ab_{50}An_{50}$ 1 6. 1
 - 2. Augite 6. _____
 - 3. Magnetite in glassy matrix 7. _____
 - 4. with small plag. laths. 8. _____
 - B. Secondary & Tertiary:
 - 1. Calcite 1 3. Prehnite 1
 - 2. Chalcocite (?) 4. _____
- 3. Alteration
 - A. Minerals formed Prehnite and calcite from feldspar - altering solution
must have carried Cu_2S
 - B. Type(s) of alteration _____

PETROGRAPHIC DESCRIPTION

Oregon Department of Geology and Mineral Industries

Field No. FB 24 #4

Classification Porphyritic andesite Portland No. P-3495-4

Collector B. A. Hanks (Baker office) Date collected 4/6/45

Location Sec. 33, T. 2N, R. 48E Quad. Elev. _____

Imnaha Group, Wallowa County, Oregon

Formation _____ Age _____ Origin Extrusive

Relationships _____

Requested by N. S. Wagner Attention to mineralization

Diagnostic or special features quite heavy

Megascopeic Description:

- 1. Color gray 2. Texture porphyritic
- 3. Minerals chalcocite (?), plagioclase
- 4. Structures and features _____

Microscopic Description:

- 1. Texture None of porphyritic lava in section
 - A. Crystallinity Porphyritic
 - B. Granularity _____
 - C. Fabric _____

2. Minerals (Summary)

- A. Primary:

1. <u>None in thin section.</u>	<u>1</u>	<u>6.</u>	<u>1</u>
2. _____		<u>6.</u>	
3. _____		<u>7.</u>	
4. _____		<u>8.</u>	
- B. Secondary & Tertiary:

1. <u>Prehnite</u>	<u>90 ± 1</u>	3. <u>Chalcocite (?)</u>	<u>5-10</u>	<u>1</u>
2. <u>Quartz</u>	<u>1 ±</u>	4. <u>Calcite</u>	<u>< 5</u>	

3. Alteration

A. Minerals formed Pectolite and quartz chalcocite and calcite added.

B. Type(s) of alteration _____

EUREKA MINING PROPERTY

Located near Mouth of Imaha River, Wallowa County, Oregon

HISTORY

In 1897 three partners made the first known discovery of mineral near the mouth of the Imaha river. These men were Elmer Barton, Mart Hibbs and Flannigan.

In the ~~next~~ two years the three men dug several small open cuts exposing what appeared to be good copper ore. At the end of this time, in 1898, the three men leased the property to a New York Company. The New York Company did no work on the property and the original owners regained the property by default.

For the ~~next~~ two years nothing was done on the property and interest was at a low ebb.

In January of 1901 Bill Rankin and Ed Zindel located a total of 13 claims and Flannigan relocated some of the claims on which he was a former partner.

Flannigan leased to the Ladd and Pilden Mining Company of Portland, Oregon. The Ladd and Pilden Company sent in their mining engineer and geologist, Professor Breerton. Examined both Flannigan's and Rankin and Zindel's properties.

According to men who are still living and talked to Breerton, he thought that the area was one of the best he had ever examined and was equaled only by one property he had examined in South Africa. He believed, according to accounts told, that underlying the entire area was an enormous blanket of high grade copper ore from which the mineral came in the present veins.

A dispute arose between the owners who were dealing with the Ladd and Pilton Company and Barton and Hibbs over property ownership

so the Ladd and Pilton Company pulled out and did not want to have anything to do with a law suit.

In the meantime Rankin and Zindel started the tunnel on the Innaha side and drove ten feet where the present Main tunnel is. Under the supervision of the Ladd and Pilton Company they also drove the upper tunnel on the mother lode for nearly 300 feet.

When the Ladd and Pilton Company left Flannigan gave up and left the country. Barton and Hibbs took over his claims.

Very shortly thereafter the Eureka and Fargo companies were incorporated by a group of wealthy farmers from Minneapolis and St. Paul, Minnesota.

The Fargo Company then purchased Barton and Hibb's 15 claims for \$15,000.00. The Eureka Company purchased the Rankin and Zindel property for \$1,000.00 in cash and \$14,000.00 in shipping from Rankin and Zindel's mining property up the Snake River. They agreed to haul ore from the Copper Mt. Mine up Snake River to Lewiston at the rate of \$6.00 per ton until the value of \$14,000.00 was reached.

The two companies extended the main tunnel from the Innaha clear through the dividing ridge to Snake River. They drove the lower mother lode tunnel and made hundreds of small open cuts and exposures. Several prospect tunnels were run and some exposed good ore bodies.

1200 acres of timber land was purchased at Buckhorn Springs and a sawmill erected. A road was then built from Buckhorn Springs to Eureka Bar on Snake River over which the lumber was hauled to build the companies' hotel and stables.

Foundations for the mill and smelter were laid and the super-structure erected.

Mr. Nearhood, who was manager for the two companies, purchased a smelter and milling equipment.

During this time the company organized a River Transportation Company and built the steamer Innaha which had a length of 165 feet. Also several mines were put in steady production and thousands of tons of ore stockpiled for milling and smelting.

When the boat was finished they began to haul machinery from Lewiston to the mining camp and mill site.

After three successful trips up the river with machinery, the boat was sunk by either an incompetent or malicious command by the captain who forced a crew member to throw a buoy with a line attached over the side in such a position that the line became entangled with the ship's screw immobilizing the vessel. This happened in Mountain Sheep rapids and as the current caught the boat it was swung around and broke into in the middle discharging the heaviest and most costly machinery in the middle of the rapids.

An investigation followed in which facts came out that seemed to indicate that Nearhood had purchased outdated and worthless equipment for a very low price and sold it to the Eureka and Fargo Companies for a great profit. It was also indicated that the boat was sunk with the equipment to keep the fraud from becoming known.

The companies then shut down the mining camp and patented the properties to await the building of an expected railroad down Snake River. The railroad never materialized and the property has lain idle from that day till this.

I wish to thank the old timers in this country some of who are still living and some who have now passed on, for the information that made the compiling of this history possible. The two who furnished the most of the information concerning this camp were the late Frank Sheppard of Joseph, Oregon and Bill Rankin who was one of the original locators of the property and who yet lives in the summer at Copper Mountain Bar on the Snake River and is still prospecting and working on mines in that area.

Ernest R. Wells

EUREKA MINING PROPERTIES

The name Eureka was used to describe the following properties because the Eureka Mining Company was the last to work the property and did most of the exploratory and developmental work.

The property, although patented by the Eureka Company in the early nineteen hundreds, was later sold by the County as tax lands.

Jay Dobbins of Joseph, Oregon, is the present owner and the land is used as range lands for cattle.

This land composes a good share of Section 19 and the northeast quarter of Section 24, Township 4 North, Range 49 East.

The major part of the development work was done in five places upon the property, scattered over a distance of more than one mile. These are listed below.

1. Mother lode. This is located approximately $1\frac{1}{2}$ miles up Snake River from the confluence of the Imnaha with the Snake River. The upper tunnel is about 1000 feet above the Snake River on the Oregon side. The lower tunnel is but 50 to 75 feet above high water mark.
2. Two Rivers or Main Tunnel. This tunnel is located about one-eighth of a mile from the junction of the two rivers and drives clear through the dividing ridge between the two rivers, having an entrance on either side of the ridge.
3. Imnaha Stringer prospects. This is located in a gulch where the trail goes over the ridge from the Imnaha to the Snake Rivers. It is about 1500 feet up the Imnaha River from the Main tunnel.

4. Lower China Creek Gulch Prospect. About 1200 feet from the river and in the left side of China Gulch at the upper end of China Bar.
5. China Gulch Branch. This tunnel is about 2500 feet from Snake River on the right hand side of China Gulch.

MOTHERLODE

These workings consisting of two tunnels and some shallow open cuts, are one of the largest exposed orebodies on the property. The upper tunnel is the only one that may be examined at the present time as the portal has sluffed at the lower tunnel damming up considerable water inside. A few hours of work should remedy this condition at the lower tunnel making an examination possible. The upper tunnel which is about 1000 feet above the river, drives on the vein for 300 feet. At the end of the 300 feet a fault was hit but several stringers run into the fault and from surface indications it should not be hard to pick the vein up on the other side of the fault. It is my opinion that within a depth of 200 feet the fault would end and the vein would be continuous. The width of the vein for the first 300 feet varies from 4 to 8 feet wide. The bulk of the ore appears to be of very good milling grade and I believe will average above 5% copper and carry some silver. Throughout the entire vein there are lenses up to a foot wide of very high grade copper ore. Also cutting through the vein lengthwise are a number of small stringers which appear to carry chalcocite. The principal copper

mineral throughout the vein is chalcopyrite, although in nearly every sample a small amount of native copper is evident.

There is at least 1000 tons of what appears to be milling ore of excellent grade on the dump.

TWO RIVERS OR MAIN TUNNEL

This tunnel which is located about one eighth of a mile from the confluence of the Imnaha and Snake Rivers was driven from the Imnaha side for a distance of nearly 700 feet to the Snake River side of the dividing ridge between the two rivers.

Drifting was done lengthwise with and on the vein. No faulting was noted anywhere between the two rivers. Two winzes were sunk in this tunnel. One of these is approximately 300 feet deep but the depth of the other is not known. The vein held its values without faulting to this depth. How much deeper it may go is of course not known. The vein holds an average width of better than 4 feet.

The mineralization of this vein is almost identical with that of the Motherlode. The major copper mineral is again chalcopyrite with a liberal sprinkling of native copper in many spots. I believe the entire orebody will average considerably better than 5% copper.

As nearly every bit of the workings at this location were done in a solid boy of ore with very little wall rock or gangue there is _____ of ore mined and piled along the trail and extends from the portal of the mine nearly to the mouth of the Imnaha river.

There is a known body of ore in this portion of the property that would have the minimum measurements of 600 feet vertically, 600 feet in length with an average width of 4 feet. As to the full extent of the vein I would not even hazard a guess.

IMNAHA STRINGER PROSPECT

This is located about 1500 feet up the Imnaha river from the Main tunnel.

The width of this vein is very small and could not be considered commercial because of its size.

Several open cuts expose the vein as it goes up the hill and one tunnel is run on it about 75 feet from the river for about 100 feet but it is so narrow that work was abandoned on this in favor of the larger veins.

Principal copper mineral is chalcopyrite.

LOWER CHINA CREEK GULCH PROSPECT

About 1200 feet from Snake River just above China Bar is a small open cut exposing a narrow vein. Just below this a short tunnel has been driven on the vein. It was gradually widening and at the end of the tunnel had attained a width of about 14 inches. Only a small amount of Chalcopyrite may be seen in the vein material.

CHINA GULCH BRANCH

This tunnel is about 2500 feet from Snake River and on the right hand side of the gulch.

The tunnel is about 200 feet long and follows a small vein that winds its way through the hill.

The vein averages from 6 inches to 2 feet wide. Although it does not attain any great width the grade of copper ore is very high. I believe the ore will average between 10 and 20% copper. As in the

other veins the principal copper minerals are chalcopyrite but quite a bit of peacock and native copper may be seen throughout the tunnel.

There has not been enough work done to determine the size of the orebody and it may widen with depth. Judging from the other veins it most probably will. In any event, it is certainly worth very close examination and if the camp were producing it would more than pay its own way for further development.

GEOLOGY OF THE COUNTRY SURROUNDING THE EUREKA MINES

It is located in a part of the great granatic intrusion that covers hundreds of square miles in Oregon. I would call the granodiorite of this area a quartz-diorite. It is rather loose in structure and no frozen veins were noted in the area as is sometimes common in a tight granatic formation.

Very little faulting is evident as great blocks of this structure have the same dip for miles.

The veins are typical quartz veins with traces of epidote seen. The quartz has been nearly entirely replaced with mineral leaving the present ore having probably less than ten percent silica. The veins were mineralized from the surrounding and underlying granites by hot circulating and ascending waters. In this particular area the waters continued to flow doing their work of mineral deposition and replacement long after most of the fissures in the country had cemented.

The most prevalent mineral in all the veins of this area is iron in the form of magnetite and Hematite. Copper ranks about third but because of its much greater value it is the commercial mineral.

It is my opinion that as depth is gained on these mines the chalcopyrite will replace the hematite entirely and a good share of the magnetite. Work in the surrounding country seems to prove this theory. 3000 feet above these deposits on the next ridge the veins have practically no copper and are nearly the solid iron materials.

As you come down the hillsides you see the copper gaining with each exposure.

I would recommend that when the assays come back from my sampling and channel cut of the property that the ore be mill tested and the most efficient mill for this type of ore be built immediately.

A property of this size should be put into productive operation as soon as possible, providing, of course, that the assays are favorable.

At the present time and for the past several years, copper has had a good market. Prospects for the future seem very bright but the less time wasted with the price of copper where it is, I believe, the better.

Ernest R. Wells.



Wallowa Title Company *Since 1907*

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June 24, 2008

PRELIMINARY REPORT NO. 22589 (JDR)

ESCROW NO. N/A

RE: TRACKWELL, Judith

TL200 PROPERTY ADDRESS: 71690 Lower Imnaha Rd

TL200 PROPERTY ADDRESS: 71680 Lower Imnaha Rd

**TL100 PROPERTY ADDRESS: 71688 Lower Imnaha Rd
Imnaha, OR 97842**

Mautz Baum & O'Hanlon, LLP
ATTN: Brent H. Smith
PO Box 967
La Grande, OR 97850

We are prepared to issue title insurance through First American Title Insurance Company in the form of **ALTA STANDARD OWNER'S POLICY** insuring title to land described as:

SEE ATTACHED AND INCORPORATED EXHIBIT A

In the amount of:

\$ _____

Premium: \$ _____

And as of June 23, 2008, at 8:00 A.M., title is vested in:

JUDITH TRACKWELL

SUBJECT TO the exceptions shown on Schedule of Exclusions from Coverage and Schedule of Standard Exceptions attached and incorporated herein, and:

1. All rights of way for ditches, public utilities and public roads as the same may now exist over and across the herein described property, including, but not limited to, County Road 727 (Upper Imnaha Road) and County Road 735 (Lower Imnaha Road).
2. **ACCESS:** The property described in Exhibit A consists of portions that are contiguous. Access to such parcels may be through these adjoining tracts. Rights of access to the property are limited to those County Roads which abut or pass through the property described herein, and no representation is made that all parcels and/or parts thereof have independent rights of access.
3. The premises herein described have been specially assessed under farm or timber deferral. If the land becomes disqualified for such special assessment under the statute, additional taxes and/or penalties and interest may be levied.
4. Any adverse claim based upon the assertion that some portion of said land has been removed from or brought within the boundaries thereof by an avulsive movement of the Imnaha River or has been formed by the process of accretion or reliction or has been created by artificial means or has accreted to such portion so created.
5. Rights of the public and of governmental bodies in and to any portion of the described property lying below the high water line of the Imnaha River.

Agent for FIRST AMERICAN TITLE INSURANCE COMPANY OF OREGON

6. RESERVATION to United States of America of all coal and other minerals, together with the right to prospect for, mine and remove same, as disclosed in Patents recorded in the following Books/Pages in 1N48 and 2N48: 39/430; 40/215; 42/388; 37/6. (TRACTS 1, 2)
7. Easement to Idaho Power Company for electric transmission line over SE $\frac{1}{4}$ NW $\frac{1}{4}$, Section 16; NW $\frac{1}{4}$ SW $\frac{1}{4}$, W $\frac{1}{2}$ NW $\frac{1}{4}$, Section 9; W $\frac{1}{2}$ SW $\frac{1}{4}$, SW $\frac{1}{4}$ NW $\frac{1}{4}$, Lot 4, Section 4; SE $\frac{1}{4}$ NE $\frac{1}{4}$, Lot 1, Section 5, 1N48, and SE $\frac{1}{4}$, SW $\frac{1}{4}$ NE $\frac{1}{4}$, Section 32, 2N48, as recorded in Book 68 of Deeds, Page 511. (TRACTS 1, 2)
8. Easement to Pacific Power & Light Company for electric transmission line across S $\frac{1}{2}$ SW $\frac{1}{4}$, Section 16; NW $\frac{1}{4}$ SW $\frac{1}{4}$, W $\frac{1}{2}$ NW $\frac{1}{4}$, Section 9; NE $\frac{1}{4}$ NE $\frac{1}{4}$, Section 8, E $\frac{1}{2}$ E $\frac{1}{2}$, Section 5, 1N48, and SE $\frac{1}{4}$, SW $\frac{1}{4}$ NE $\frac{1}{4}$, Section 32, 2N48, as recorded in Book 69 of Deeds, Page 167. (TRACTS 1, 2)
9. Right of way Easement 20 feet wide for power line in E $\frac{1}{2}$ SE $\frac{1}{4}$, Section 5, 1N48, recorded in Book 99 of Deeds, Page 330. (TRACT 1)
10. RESERVING all mineral and subterranean rights on any lands described in Sections 16, 20 and 21, T2N, R48 EWM, together with the right of ingress to remove same, as shown by Deed recorded in Book 83 of Deeds, Pages 235 and 510, and Book 101 of Deeds, Page 626. (TRACT 3)
11. Easement to Idaho Power Company as recorded in Book 68 of Deeds, Page 509. (TRACT 3)
12. Reservation to J.G. Matheny, his heirs and assigns, waters of a certain spring, being the only spring on NE $\frac{1}{4}$ SW $\frac{1}{4}$, Section 16, 1N48, together with a 2-foot right of way from said spring to the North line of the SW $\frac{1}{4}$ SW $\frac{1}{4}$, Section 16, as shown by Deed recorded in Book 31 of Deeds, Page 141. (TRACT 3)
13. Perpetual non-exclusive easement 75' in width over a portion of Section 22, 1N48, as recorded in Book 97 of Deeds, Page 222. (TRACT 4)
14. Reservation to Wilson Wilde, et ux, their successors and assigns, an easement over portions of Sections 16 and 21, 1N48, appurtenant to the property described in Exhibit C (Homesite) of Deed recorded in Book 105, Page 319, for the purpose of establishing, maintaining, repairing and re-establishing a pump, its accessories and water pipeline from the Imnaha River over, across and under the subject property to the Exhibit C property, to irrigate the Exhibit C property described in said Deed (105/319). (TRACT 4)
15. Right of way conveyed to USA for roadway over and across the SE $\frac{1}{4}$ SW $\frac{1}{4}$, Section 16, and E $\frac{1}{2}$ NW $\frac{1}{4}$, Section 21, 2N48 as shown by Deed recorded in Book 48 of Deeds, Page 93. (TRACT 3)
16. Right of way conveyed to USA for roadway over SE $\frac{1}{4}$ NW $\frac{1}{4}$, NE $\frac{1}{4}$ SW $\frac{1}{4}$, NW $\frac{1}{4}$ SE $\frac{1}{4}$, SE $\frac{1}{4}$ NE $\frac{1}{4}$, Section 21, N $\frac{1}{2}$ NW $\frac{1}{4}$, NW $\frac{1}{4}$ NE $\frac{1}{4}$, S $\frac{1}{2}$ NE $\frac{1}{4}$, Section 22, SW $\frac{1}{4}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$, Section 36, 1N48, as shown by Deed recorded in Book 47 of Deeds, Page 382. (TRACT 3)
17. Easements to Idaho Power Company recorded in Book 68 of Deeds, Pages 509, 526 and 597, and easement to Pacific Power & Light Company recorded in Book 70 of Deeds, Page 504. (TRACT 3)
18. Easement to Homa Sandlin and Frank Reavis over tract in SW $\frac{1}{4}$ SE $\frac{1}{4}$, Section 20, 2N48, as shown by Deed recorded in Book 82 of Deeds, Page 154. (TRACT 3)
19. Easement for care and maintenance of pipe and spring described as: Beginning at a point 150 feet Southwesterly along the East line from the Northeast corner of Lot 9, Oxbow Subdivision; thence Easterly 531 feet to top side of spring site, as described in Deed recorded in Book 101 of Deeds, Page 626. (TRACT 3)

RELIMINARY REPORT NO. 22589

Page 3

20. Easement 60 feet in width running along the present line of the Old Government Trail down the Imnaha River to Horse Creek and along the Old Power Line Construction Road for ingress, egress and utilities, as described in Deed recorded in Book 101 of Deeds, Page 626. (TRACT 3)
21. Trail easement as described in instrument recorded in Book 91 of Deeds, Page 42. (TRACT 3)
22. Lease Agreement, including the terms and provisions thereof, (TRACT 4)

Dated: November 15, 1992
 Recorded: January 6, 1993, as Microfiche No. 93-22760
 Between: Hubbard Ranch
 And: Imnaha Rodeo Club
 Located: Part TL2901 in NW¼NW¼, Section 21, 1N48
 Term: 12/31/2003, automatic 10-year extension

- 22a. Assignment of Lease, including the terms and provisions thereof,

Dated: October 11, 2005
 Recorded: October 18, 2005, as Microfiche No. 2005-54254
 From: Hubbard Ranch
 To: Judith Trackwell
 Of: Assignment of Lessor's interest in above Lease

23. Easement Agreement, including the terms and provisions thereof, (TRACT 4)

Dated: May 12, 1993
 Recorded: June 8, 1993, as Microfiche No. 93-23719
 In Favor Of: David R. Tanzey
 For: Septic drain field
 In: NW¼NW¼, Section 21 1N48, East of road

24. Farm Lease, including the terms and provisions thereof, (TRACT 4)

Dated: March 25, 1994
 Recorded: March 25, 1994, as Microfiche No. 94-25866
 Between: Donald P. Hubbard and Dorothy M. Hubbard
 And: Wilson Wilde and Catherine Wilde, Trustees of Wilde Trust
 On: Tract in NW¼, Section 21, 1N48
 Term: March 25, 1999, with 2 automatic five-year extensions



- 24a. Assignment of Lease, including the terms and provisions thereof,

Dated: October 11, 2005
 Recorded: October 18, 2005, as Microfiche No. 2005-54255
 From: Donald P. Hubbard and Dorothy M. Hubbard
 To: Judith Trackwell
 Of: Assignment of Lessor's interest in above Lease

EXHIBIT A**TRACT 1****Township 1 North, Range 48 East of the Willamette Meridian, Wallowa County, Oregon**

Section 3: Lots 3 and 4, S½NW¼, SW¼
 Section 4: Lots 1, 2, 3 and 4, S½N½, S½
 Section 5: Lots 1, SE¼NE¼, S½SW¼, SE¼
 Section 8: All
 Section 9: All
 Section 10: W½
 Section 15: NW¼
 Section 16: N½
 Section 17: N½N½

EXCEPTING THEREFROM the following parcels located in TIN, R48 EWM:

1. Beginning at the Southeast corner of the SW¼NW¼, Section 16, 1N48; thence running North on the quarter Section line 13 rods; thence West 54-6/11 rods to the Imnaha River; thence South up and along the river 14 rods to the quarter section line between the NW¼ and the SW¼ of said Section 16; thence East to the point of beginning.
2. Beginning at the Southwest corner of the NW¼, Section 16, 1N48; thence running due East to the Imnaha River; thence down said Imnaha River along the West bank in a Northerly direction to a point far enough so that by running due West to the West Section line of said Section 16, and thence South to the place of beginning, it will enclose three and one-half acres; thence from said point on the West bank of the Imnaha River, West to said Section line; thence due South to the place of beginning.
3. Beginning at a point which is North 89°44' West 908.39 feet from the Northeast corner of Section 5, T1N R48 EWM; thence South 26°58½' East 208.62 feet; thence South 25°31' East 190.71 feet; thence South 18°42½' East 279.80 feet; thence South 21°29½' East 385.56 feet; thence South 0°09' East 232.78 feet; thence South 11°51½' West 322.16 feet; thence South 16°17½' West 375.19 feet; thence South 11°00½' East 232.96 feet; thence South 0°22¼' East 325.34 feet; thence South 5°09½' East 455.14 feet; thence South 3°30¼' West 154.95 feet; thence South 13°43' West 273.58 feet; thence South 17°45¼' West 408 feet; thence South 22°33½' West 349.09 feet; thence South 29°44' West 62.30 feet; thence South 26°54½' West 228.43 feet; thence South 39°03¼' West 179.69 feet; thence South 9°56½' East 332.85 feet; thence South 47°52½' East 188.99 feet; thence South 41°53' East 246.01 feet; thence South 41°46¼' East 198.27 feet; thence South 33°48¼' East 147.58 feet to a point which is on the section line between Sections 5 and 8, and South 89°45' West a distance of 435.52 feet from the Southeast corner of Section 5, T1N R48 EWM; thence South 34°01½' East 301.97 feet to a point which is the Southeast corner of this tract; thence South 89°45' West 357.45 feet to a point which is the Southwest corner of this tract, said point being situate in the center of the channel of the Imnaha River; thence North 35°43' West 206.47 feet; thence North 36°01' West 199.47 feet; thence North 45°50½' West 245.91 feet; thence North 43°35½' West 369.06 feet; thence North 0°34¼' East 554.12 feet; thence North 28°09½' East 177.80 feet; thence North 30°20½' East 990.58 feet; thence North 30°07' East 402.85 feet; thence North

1°49-3/4' East 190.51 feet; thence North 24°25' West 282.44 feet; thence North 16°16-3/4' West 525.10 feet; thence North 6°34' West 450.57 feet; thence North 3°21' East 443.71 feet; thence North 0°40½' West 401.44 feet; thence North 21°01¼' West 274.13 feet; thence North 26°43' West 190.67 feet; thence North 45°00' West 336.68 feet to a point which is the Northwest corner of this tract and which point is located on the Township line between Townships 1 and 2 North, Range 48 East of the Willamette Meridian; thence South 89°44' East 240.87 feet to the point of beginning

TRACT 2

Township 2 North, Range 48 East of the Willamette Meridian, Wallowa County, Oregon

Section 27: S½SW¼
 Section 28: SE¼SE¼
 Section 32: NE¼NE¼, S½NE¼, SE¼
 Section 33: All
 Section 34: NW¼, N½SW¼, SW¼SW¼

EXCEPTING THEREFROM the following described parcel located in the S½NE¼ and SE¼ of Section 32, T2N, R48 EWM:

BEGINNING at the Northwest corner of the S½NE¼, Section 32, T2N, R48 EWM; thence South 89°56' East (variation 22 East) 7.215 chains to a point in the center of the County Road; thence South 36°08' East 1.91 chains; thence South 8°19' East 1.74 chains; thence South 23°5' East 1.53 chains; thence South 35°32' East 5.73 chains; thence South 51°38' East 3.61 chains; thence South 53°48' East 3.97 chains; thence South 33°31' East 3.50 chains; thence South 6°32' East 4.91 chains; thence South 2°24' East 6.91 chains; thence South 14°57' West 1.46 chains; thence South 8°26' West 4.10 chains; thence South 4°23' West 5.71 chains; thence South 8°4' East 7.95 chains; thence South 20°50' East 1.73 chains; thence South 18°15' East 6.59 chains; thence South 30°41' East 4.98 chains to a point on the South line of the SE¼SE¼ of Section 32; thence South 89°59' West on and along said South line of said Section 32 to the Southwest corner of the SE¼ of said Section 32; thence along the West line of said SE¼ and S½NE¼ to the point of beginning.

TRACT 3

Township 2 North, Range 48 East of the Willamette Meridian, Wallowa County, Oregon

Section 16: E½NE¼, E½SE¼, E½SW¼NE¼, E½NW¼SE¼, **ALSO:** (1) Beginning at the Southeast corner of the NW¼NE¼; thence West 660 feet; thence North 30° East 1475 feet to the Northeast corner of the NW¼NE¼; thence South 1320 feet to the point of beginning; **ALSO:** (2) Beginning at the Southeast corner of the SW¼SE¼; thence West 1320 feet; thence North 660 feet; thence North 45° East 993 feet; thence East 660 feet; thence South 1320 feet to the point of beginning; **ALSO:** (3) Beginning at the Southeast corner of the SE¼SW¼; thence West 660 feet; thence North 45° East 993 feet; thence South 660 feet to the point of beginning.

- Section 20: (1) Beginning at the Southeast corner of the SE $\frac{1}{4}$ NE $\frac{1}{4}$; thence West 202 feet; thence North 28°58' East 404 feet; thence South 350 feet to the point of beginning; **ALSO:** (2) Beginning at the Southeast corner of the NE $\frac{1}{4}$ SE $\frac{1}{4}$; thence West 995 feet; thence North 15°54' East 1029 feet; thence East 300 feet; thence North 29°58' East 335 feet; thence East 202 feet; thence South 1320 feet to the point of beginning; **ALSO:** (3) Beginning at the Southeast corner of the SE $\frac{1}{4}$ SE $\frac{1}{4}$; thence West 1320 feet; thence North 1042.92 feet to the center of the existing road; thence North 55°31' East 142.22 feet along said road; thence North 76°06' East 190.95 feet to the intersection of said road and power center line; thence North 15°54' East 156 feet along said power line; thence East 995 feet; thence South 1320 feet to the point of beginning; **ALSO:** (4) A tract in the SW $\frac{1}{4}$ SE $\frac{1}{4}$ described as: Beginning at a point which bears North 424.24 feet and East 834.91 feet from the South quarter corner of Section 20; thence North 73°10' East 183.20 feet along the center of the existing road; thence North 36°01' East 181.85 feet along the center of the existing road; thence North 7°16' West 185.75 feet along the center of the existing road; thence North 39°25' East 233.95 feet along the center of the existing road; thence North 55°31' East 94.68 feet along the center of the existing road to its intersection with the East line of said SW $\frac{1}{4}$ SE $\frac{1}{4}$; thence South 868.92 feet to a point 174 feet North of the Southeast corner of said SW $\frac{1}{4}$ SE $\frac{1}{4}$; thence West 627 feet to a point in the center of the Imnaha River, which point being 555 feet up the Imnaha River from the center of the County Bridge; thence North 39°46' East 221.40 feet; thence North 80 feet to the point of beginning.
- Section 21: N $\frac{1}{2}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$, N $\frac{1}{2}$ SE $\frac{1}{4}$, SE $\frac{1}{4}$ SE $\frac{1}{4}$, S $\frac{1}{2}$ SW $\frac{1}{4}$, NW $\frac{1}{4}$ SW $\frac{1}{4}$, **ALSO:** Beginning at the Southeast corner of the NW $\frac{1}{4}$ NW $\frac{1}{4}$; thence West 761 feet; thence North 29°58' East 1524 feet; thence South 1320 feet to the point of beginning.
- Section 22: NE $\frac{1}{4}$ NW $\frac{1}{4}$
- Section 27: NW $\frac{1}{4}$, N $\frac{1}{2}$ SW $\frac{1}{4}$
- Section 28: NE $\frac{1}{4}$, N $\frac{1}{2}$ SE $\frac{1}{4}$, E $\frac{1}{2}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$ NW $\frac{1}{4}$

TRACT 4

Township 1 North, Range 48 East of the Willamette Meridian, Wallowa County, Oregon

- Section 16: SE $\frac{1}{4}$, NE $\frac{1}{4}$ SW $\frac{1}{4}$, **ALSO:** The following tract in the SE $\frac{1}{4}$ SW $\frac{1}{4}$ described as: Beginning at the Northeast corner of the SE $\frac{1}{4}$ SW $\frac{1}{4}$; thence South along the East line of said SE $\frac{1}{4}$ SW $\frac{1}{4}$ 350 feet to the North line of the Flowers tract; thence West and parallel with the North line of said SE $\frac{1}{4}$ SW $\frac{1}{4}$ and along the North line of said Flowers tract a distance of about 470 feet to the foot or bottom of the first rim East of the Imnaha River and the Southeast corner of the Buchanan tract; thence Northerly along the foot or bottom of the rim to the North line of said SE $\frac{1}{4}$ SW $\frac{1}{4}$; thence East along said North line to the point of beginning.

EXCEPTING from the NE $\frac{1}{4}$ SW $\frac{1}{4}$, Section 16, T1N, R48 EWM, the following tract: Beginning at the Southwest corner of the NE $\frac{1}{4}$ SW $\frac{1}{4}$; thence North along the West line of said NE $\frac{1}{4}$ SW $\frac{1}{4}$, 290 feet, being the Northwest corner of the Buchanan tract; thence East and parallel with the South line of said NE $\frac{1}{4}$ SW $\frac{1}{4}$ on and along the North line of said Buchanan tract a distance of about 850 feet to the foot or bottom of the first rim East of the Imnaha River and to the Northeast corner of said Buchanan tract; thence in a Southerly direction along the foot or bottom of said rim to the South line of said NE $\frac{1}{4}$ SW $\frac{1}{4}$; thence West along said South line to the point of beginning.

ALSO EXCEPTING tract situated in the SE $\frac{1}{4}$ of Section 16 and the NW $\frac{1}{4}$ NE $\frac{1}{4}$ and NE $\frac{1}{4}$ NW $\frac{1}{4}$ of Section 21, T1N, R48 EWM, described as follows: Beginning at a point which is 100 feet East of the Southwest corner of the SE $\frac{1}{4}$ SW $\frac{1}{4}$, Section 16; running thence South 220 feet; thence East 1280 feet; thence North 1186 feet; thence West 1130 feet; thence South 5 $^{\circ}$ 20' West 365 feet thence North 84 $^{\circ}$ 40' West 150 feet; thence South 5 $^{\circ}$ 10' West 211 feet; thence South 84 $^{\circ}$ 40' East 16 feet; thence East 36 feet; thence South 406.1 feet to the point of beginning.

Section 21: NE $\frac{1}{4}$ NE $\frac{1}{4}$, S $\frac{1}{2}$ NE $\frac{1}{4}$, W $\frac{1}{2}$ SE $\frac{1}{4}$, E $\frac{1}{2}$ NW $\frac{1}{4}$, all that part of the SW $\frac{1}{4}$ lying East of the center of the Imnaha County Road, all that part of the W $\frac{1}{2}$ NW $\frac{1}{4}$ lying East of the Imnaha River

Section 22: NW $\frac{1}{4}$ NE $\frac{1}{4}$, S $\frac{1}{2}$ NE $\frac{1}{4}$, N $\frac{1}{2}$ NW $\frac{1}{4}$

Section 28: That part of the NW $\frac{1}{4}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ NE $\frac{1}{4}$, NE $\frac{1}{4}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$ NE $\frac{1}{4}$ and SE $\frac{1}{4}$ lying East of the center of the Imnaha County Road

Section 33: That part of the NE $\frac{1}{4}$ NE $\frac{1}{4}$ lying East of the center of the Imnaha County Road

Section 34: NW $\frac{1}{4}$ NW $\frac{1}{4}$, that part of the SW $\frac{1}{4}$ NW $\frac{1}{4}$ and SE $\frac{1}{4}$ NW $\frac{1}{4}$ and N $\frac{1}{2}$ SW $\frac{1}{4}$ lying North of the following described line and East of the Imnaha County Road: Beginning at a point on the subdivision line through the center of Section 34, which point bears North 0 $^{\circ}$ 14' West a distance of 2852.7 feet from the South quarter corner of said Section 34, and which point is also located in an existing fence line; thence South 75 $^{\circ}$ 05' West along the existing fence line a distance of 1353 feet; thence South 18 $^{\circ}$ 10' West along the existing fence line a distance of 75 feet; thence South 36 $^{\circ}$ 08' East along the existing fence line a distance of 322 feet; thence South 59 $^{\circ}$ 18' East along a natural barrier of rim rock a distance of 184 feet; thence South 17 $^{\circ}$ 12' West along a natural barrier of rim rock a distance of 203 feet; thence South 13 $^{\circ}$ 19' West along the existing fence line a distance of 156 feet; thence South 3 $^{\circ}$ 51' East along a natural barrier of rim rock a distance of 206 feet; thence North 73 $^{\circ}$ 38' West along a natural barrier of rim rock a distance of 634 feet; thence South 41 $^{\circ}$ 30' West along the existing fence line a distance of 249 feet; thence South 73 $^{\circ}$ 00' West along the existing fence line a distance of 335 feet to a point in the center of the County Road

EXCEPTING from Section 21, T1N, R48 EWM, the following tract: Beginning at the Southeast corner of tract known as the Wilson Wilde home site, being Tax Lot 1601, 1N48 16; running thence South 75 feet; thence West to the Easterly right of way line of the roadway; thence Northeasterly along said roadway to the Southwest corner of the Wilde tract; thence East to the point of beginning. (105/319)

TRACT 5

Township 2 North, Range 48 East of the Willamette Meridian, Wallowa County, Oregon

Section 20: Tract in the SW $\frac{1}{4}$ SE $\frac{1}{4}$ described as: Beginning at a point which bears North 424.24 feet and East 834.91 feet from the South quarter corner of said Section 20; thence South 80 feet; thence South 39 $^{\circ}$ 46' West 221.40 feet to the center of the Imnaha River, said point being 555 feet up the Imnaha River from the center of the County Bridge; thence North 52 $^{\circ}$ 21' West 202.19 feet down the Imnaha River; thence North 71 $^{\circ}$ 14' East 280 feet to the point of beginning.

TRACT 6

Township 2 North, Range 48 East of the Willamette Meridian, Wallowa County, Oregon

Section 21: Beginning at the Southeast corner of the SW $\frac{1}{4}$ NW $\frac{1}{4}$; thence West 1320 feet; thence North 350 feet; thence North 29°58' East 1166 feet; thence East 761 feet; thence South 1320 feet to the point of beginning

TRACT 7

Township 2 North, Range 48 East of the Willamette Meridian, Wallowa County, Oregon

A tract located in Sections 16, 20, 21 and 29 described as follows: Beginning in Section 16 at the Northeast corner of the NW $\frac{1}{4}$ NE $\frac{1}{4}$; thence South 30° West 1475 feet to a point 660 feet West of the Southwest corner of the NW $\frac{1}{4}$ NE $\frac{1}{4}$; thence South to a point 660 feet West of the Southeast corner of the NW $\frac{1}{4}$ SE $\frac{1}{4}$; thence South 45° West to a point 660 feet West of the Southeast corner of the SE $\frac{1}{4}$ SW $\frac{1}{4}$; thence West 660 feet to the Northwest corner of the NE $\frac{1}{4}$ NW $\frac{1}{4}$, Section 21; thence South 29°58' West 3429 feet; thence West to the Southeast corner of Lot 9 of Oxbow Subdivision as recorded in Book 2 of Plats, Page 65; thence Northerly through Section 20 and into Section 16 along the West boundary of said Oxbow Subdivision to the Northeast corner of Lot 7 of said Oxbow Subdivision, which point is in the center of the Imnaha River in Section 16; thence along the center of the Imnaha River to the North line of Section 16; thence East along said Section line to the point of beginning.

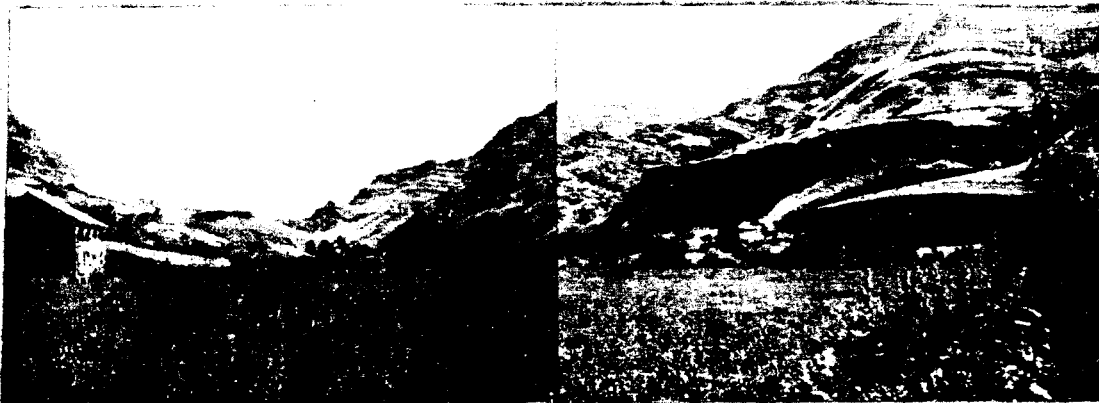
EXCEPTING THEREFROM a tract of land conveyed to Edwin H. Coe described in instrument recorded in Book 65 of Deeds, Page 226.

ALSO EXCEPTING THEREFROM a tract of land described as: Beginning at the Southwest corner of the NW $\frac{1}{4}$ SE $\frac{1}{4}$, Section 16, T2N, R48 EWM; thence East 660 feet to the West boundary line of tract deeded to Wilson Wilde in instrument recorded in Book 85 of Deeds, Page 258; thence North 1200 feet; thence West to the center of the Imnaha River; thence South of the River around the horseshoe bend to the West line of the NW $\frac{1}{4}$ SE $\frac{1}{4}$, Section 16; thence continuing Westerly along the center of the River 125 feet; thence South to the South line of the NE $\frac{1}{4}$ SW $\frac{1}{4}$, Section 16; thence East to the point of beginning.

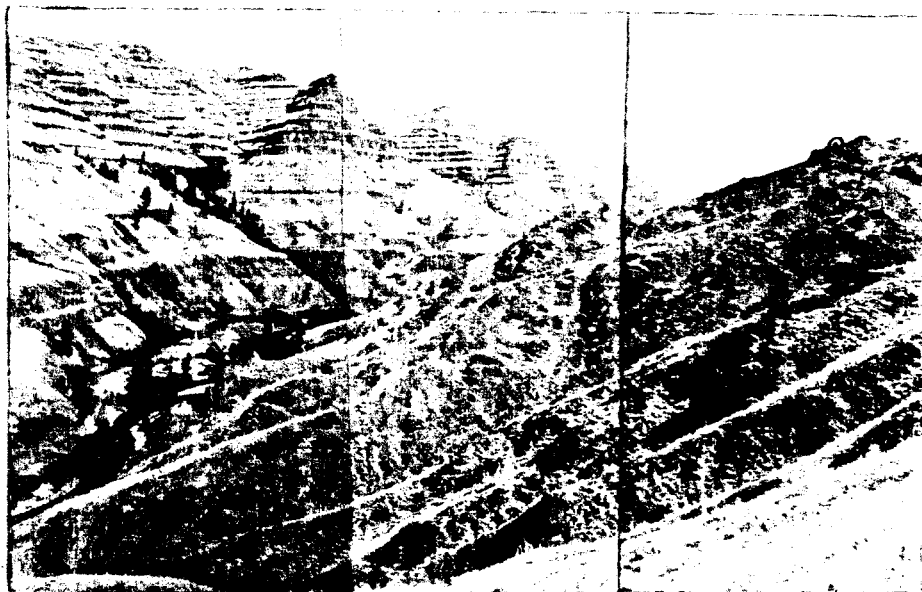
TRACT 8

Township 2 North, Range 48 East of the Willamette Meridian, Wallowa County, Oregon

Section 21: SW $\frac{1}{4}$ NE $\frac{1}{4}$, NE $\frac{1}{4}$ NW $\frac{1}{4}$, NE $\frac{1}{4}$ SW $\frac{1}{4}$, SW $\frac{1}{4}$ SE $\frac{1}{4}$
Section 28: NW $\frac{1}{4}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$, SW $\frac{1}{4}$ SE $\frac{1}{4}$
Section 34: SE $\frac{1}{4}$ SW $\frac{1}{4}$



View looking north showing southernmost end of andsite area. Overlying basalts are to be seen in the extreme right and also in the distance.



Close-up view of andesite area as seen from about the point marked in the picture above. This point was on the east side of the river directly opposite Fence Creek. Picture also taken in a northward direction.



Another view showing andesite area on down the canyon. Taken from about the point indicated on the preceding picture.



Picture of lava pyramid shown in the second picture on the preceding page. This picture shows a little of the andesite outcrop, but otherwise has no particular significance in terms of this report. Picture was taken separately because of the erosional features contained.